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**The intestinal epithelial response to damage.**

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**Public Summary:**

**Scientific Abstract:**

The constant renewal of the intestinal epithelium is fueled by intestinal stem cells (ISCs) lying at the base of crypts, and these ISCs continuously give rise to transit-amplifying progenitor cells during homeostasis. Upon injury and loss of ISCs, the epithelium has the ability to regenerate by the dedifferentiation of progenitor cells that then regain stemness and repopulate the pool of ISCs. Epithelial cells receive cues from immune cells, mesenchymal cells and the microbiome to maintain homeostasis. This review focuses on the response of the epithelium to damage and the interplay between the different intestinal compartments.

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